



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/762,759 | 02/09/2001 | Peter Langheinrich | 875-00 | 8552 |
| 7590 | 10/24/2003 | | | EXAMINER |
| John F McNulty Paul & Paul 2900 Two Thousand Market Street Philadelphia, PA 19103 | | | | ABRAMS, NEIL |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2839 | |
| DATE MAILED: 10/24/2003 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

Faxed to
Mr. Ojan 11-7-03

Office Action Summary

| | | |
|-----------------|----------------|--|
| Application No. | Applicant(s) | |
| 09/762759 | | |
| Examiner | Group Art Unit | |
| Abrams | 2839 | |

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- Responsive to communication(s) filed on 9-11-03
- This action is FINAL.
- Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- Claim(s) 1-15 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- Claim(s) _____ is/are allowed.
- Claim(s) 1-~~15~~ 6, 10-15 is/are rejected.
- Claim(s) 7-9 is/are objected to.
- Claim(s) _____ are subject to restriction or election requirement

Application Papers

- The proposed drawing correction, filed on _____ is approved disapproved.
- The drawing(s) filed on _____ is/are objected to by the Examiner
- The specification is objected to by the Examiner.
- The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- All Some* None of the:
- Certified copies of the priority documents have been received.
- Certified copies of the priority documents have been received in Application No. _____.
- Copies of the certified copies of the priority documents have been received
in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____

Attachment(s)

- Information Disclosure Statement(s), PTO-1449, Paper No(s). _____ Interview Summary, PTO-413
- Notice of Reference(s) Cited, PTO-892 Notice of Informal Patent Application, PTO-152
- Notice of Draftsperson's Patent Drawing Review, PTO-948 Other _____

Office Action Summary

Art Unit: 2839

Spec. The "V" equation should be added to the spec, "detailed description" portion.

Claim 6, should read --at least one of said intervals---

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 and 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over

PCT/W04740 alone or taken in view of Bayer, Haase and Metzka.

PCT figs 9-16 device includes contact element 104a with three contact pins or humps 108 would meet the claims 1, 13, 15 "V" limitation. The contact pin side surfaces (see fig. 8 contact core 62) are not exposed due to sleeves 58, 70. However, note that the sleeves 58-70 and thin coating 74 (Fig. 8) are designed to protect the contacts from corrosion. Omission of these features 58, 70 and their function should not provide a basis for patentability. Nothing in the invention, prevents such corrosion and therefore the change only amounts to omission of a feature and loss of its function.

Art Unit: 2839

In addition, Haase and Bayer show clamps for use in acid baths that include fully exposed contacts. Metzka uses contacts 58, 38 that are only covered by coatings 66. In view of these references it would have been obvious to form the ~~PCT~~ contact pins or humps to be fully exposed or to be covered only by coating 74. These changes would save expense. The ~~PCT~~ contact pins either with or without coating 74 would be exposed for cooling hence in either condition would meet claim 1, lines 11-13 language which does not require "conductive" side faces to be exposed. Claims 2, 3, 10-12 treated as discussed in last office action. Claims 4, 5 use of rows relates to obvious variation which would allow increased current.

Claims 1-6, 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Metzka alone or in view of Bayer and Haase.

For claims 1, 13, 15 Metzka discloses a system for use in electrolytic process having a contact element 49 with contact pins 56, 56 having contact faces 58 with areas and boundary lines. With two circular area pins the "V equals at least 25" equation would be met. While not discussed, it is obvious that "large current" could be used without damage since these are standard design parameters.

Metzka contact cores with coatings 66 are read as contact elements and are exposed for washing. Claims 2, 3, also met by Metzka system. For claims 4, 5, obvious to use plural contacts 56 and 58 in rows that being standard way to increase current and for claim 6, space between contacts 56 is readable as a groove. Claims 13-15 rejected as in case of claim 1.

Art Unit: 2839

Should the matter of coating 66 be at issue, note Haase clamps with exposed humps and Bayer use of clamps with fully exposed contacts at 4A, 4B. As an alternative obvious to omit Metzka coatings 66 in view of Bayer and Haase this change saving expense.

Claims 10-12 materials considered obvious matters of design.

Claims 1, 2, 6, (10/1, 2, 6), (11/1, 2, 6), (12/1, 2, 6) 13, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haase in view of Owen, Bayer and Metzka.

Haase discloses an electroplating use clamps with contact element 18 having humps 15, 16, fig. 5.

Haase does not disclose use of the clamp for current transmission. Bayer, Owen and Metzka disclose clamps used for current. Obvious to use such current transmission in Haase clamp. This is necessary for electrode position. The Haase hump ridges at lead lines 15, 16 do not form areas as recited in these claims.

Metzka shows a clamp with flat engaging surfaces at 40, 58. It would have been obvious to form the Haase humps 15, 16 with such flattened surfaces to prevent damage to substrates, so formed the humps would meet the "V" equation. Claims 2, 13, 14 15 also met by Haase, so formed. For claim 6, humps 15, 16 are separated by a groove. Claims 10-12 relate to obvious choice of materials. For claim 13, lower end of 44 is read as a stem.

Claims 1, 2, 3, 10/3, 11/3, 12/3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Owen in view of Metzka.

Art Unit: 2839

Owens shows a contact clamp 1 with contact element 8 and humps 9. Obvious to form the humps with flat (rounds) areas in view of Metzka at 58. This would help to prevent damage to the product. Functionally recited use with a printed circuit board does not overcome Owen. In addition Metzka discloses use of such clamps with circuit boards. Also obvious to use Owen clamp for a pcb, that being a standard use of such clamps. Claims 10-12 treated as discussed above.

Applicant's arguments filed with the last response have been fully considered but they are not persuasive. While coverings might be considered essential by patentees, the Examiners position is that their omission has not been shown to produce any new or unexpected result but *is seen* only to be an obvious variation to save expense. Also *not* ^{note} that while exact dimensions are not given, for Haase as modified, with thin flat areas at 15, 16 or for Owen as modified the "V equals at least 25" equation would be easily met. While Metzka, as applied above is adequate, the rejection using PCT is also applied since some aspects of the Metzka assembly might become at issue and PCT provides a more detailed and exact disclosure of the use of contact pins or humps.

Claims 7-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication should be directed to N. Abrams at telephone number (703) 308-1729.

Application/Control Number: 09/762,759

Page 6

Art Unit: 2839

N ABRAMS/pj

11/06/03



NEIL ABRAMS
EXAMINER
ART UNIT 322